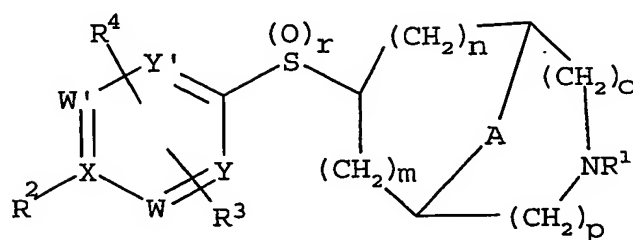


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## Claims:

1. A compound represented by Formula (I) or pharmaceutically acceptable salts thereof:



(I)

wherein:

R<sup>1</sup> is -H,

C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or aryl-C<sub>1-4</sub>alkyl;

R<sup>2</sup> is -H,

-OH,

-NH<sub>2</sub>,

-NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO<sub>2</sub>-;

V is H, aryl, aryl-C<sub>1-12</sub>alkyl, diaryl-C<sub>1-12</sub>alkyl, lactonyl, or C<sub>1-18</sub>alkyl optionally substituted with halogen, hydroxyl, C<sub>1-4</sub>alkoxy, -

C(O)OC<sub>1-4</sub>alkyl, -OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-4</sub>alkoxy, aryloxy, or SO<sub>2</sub>C<sub>1-4</sub>alkyl; and

T is H, halogen, C<sub>1-5</sub>alkyl, C<sub>1-4</sub>alkoxy, nitro, aryl, aryl-C<sub>1-4</sub>alkyl, or aryloxy unless V is H in which case T is absent,

aryl,

-(L)<sub>a</sub>-Z,

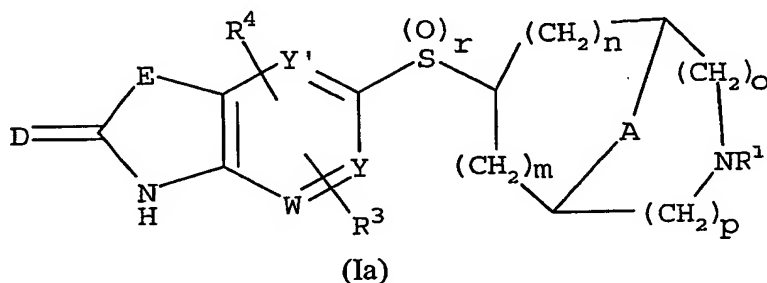
wherein

L is CH<sub>2</sub>, CO, O, NH or N(C<sub>1-4</sub>alkyl) and a is 0 or 1;

and

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Z is C<sub>1-3</sub>alkyl-F, C<sub>0-3</sub>alkyl-aryl-R<sup>6</sup>, C<sub>0-3</sub>alkyl-CO-R<sup>6</sup>, C<sub>0-3</sub>alkyl-CO-NR<sup>6</sup><sub>2</sub>, C<sub>0-3</sub>alkyl-CO<sub>2</sub>-R<sup>6</sup>, C<sub>0-3</sub>alkyl-SO<sub>2</sub>-R<sup>6</sup>, C<sub>0-3</sub>alkyl-SO<sub>2</sub>-NR<sup>6</sup><sub>2</sub>, C<sub>1-3</sub>alkyl-OR<sup>6</sup>, C<sub>1-3</sub>alkyl-CN or C<sub>1-3</sub>alkyl-NR<sup>6</sup><sub>2</sub>, wherein each C<sub>0-3</sub>alkyl or C<sub>1-3</sub>alkyl portion is optionally substituted with from 1 to 6 groups selected from F and C<sub>1-5</sub>alkyl, linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)

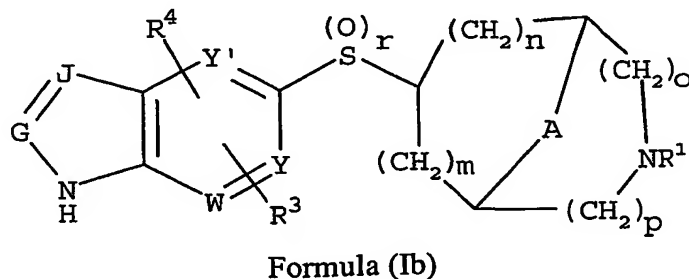


wherein

D is O or S; and

E is O, S, NR<sup>5</sup>, C(R<sup>5</sup>)<sub>2</sub>, O-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CR<sup>5</sup><sub>2</sub>,NR<sup>5</sup>-CO, CR<sup>5</sup><sub>2</sub>-O, CR<sup>5</sup><sub>2</sub>-S(O)<sub>r</sub>, CR<sup>5</sup><sub>2</sub>-NR<sup>5</sup>,CR<sup>5</sup><sub>2</sub>-CR<sup>5</sup><sub>2</sub>, CO-NR<sup>5</sup>, or CR<sup>5</sup>=CR<sup>5</sup>; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ib)



wherein

G is CR<sup>5</sup> or N; andJ is CR<sup>5</sup> or N;

unless X is N in which case R<sup>2</sup> is absent

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R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>5</sup> is each independently H or C<sub>1-4</sub>alkyl;

R<sup>6</sup> is each independently H, C<sub>1-6</sub>alkyl, aryl or arylC<sub>1-4</sub>alkyl, each of which (except H) may be optionally substituted with from 1 to 3 fluorine atoms;

X is C or N;

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

A is optionally a double bond, (CH<sub>2</sub>)<sub>q</sub> or (CH<sub>2</sub>)O(CH<sub>2</sub>);

m, n, o and p are independently 0, 1, 2 or 3;

q is optionally 1, 2 or 3;

r is 0, 1 or 2.

provided that

when X, W, W', Y and Y' are all C, R<sup>3</sup> is H, R<sup>4</sup> is H or Cl positioned *meta* to the sulphur atom, A is (CH<sub>2</sub>)<sub>q</sub> and R<sup>1</sup> is selected from H, unsubstituted C<sub>1-4</sub>alkyl and unsubstituted C<sub>3-4</sub>cycloalkyl; then R<sup>2</sup> may not be H or -OH, and that

when one of X, Y and Y' is N, R<sup>3</sup> is H, R<sup>4</sup> is H or Cl positioned *meta* to the sulphur atom, A is (CH<sub>2</sub>)<sub>q</sub> and R<sup>1</sup> is selected from H, unsubstituted C<sub>1-4</sub>alkyl and unsubstituted C<sub>3-4</sub>cycloalkyl; then R<sup>2</sup> may not be H or -OH.

2. A compound as claimed in Claim 1

wherein:

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$R^2$  is -H,  
-NH<sub>2</sub>,  
-NH-Q-V-T as defined in claim 1,  
aryl,  
5 -(L)<sub>a</sub>-Z as defined in claim 1,  
linked back to the aromatic ring so as to form a fused bicyclic compound  
represented by Formula (Ia) as defined in claim 1, or  
linked back to the aromatic ring so as to form a fused bicyclic compound  
represented by Formula (Ib) as defined in claim 1;  
10 unless X is N in which case  $R^2$  is absent.

3. A compound as claimed in Claim 1 or Claim 2  
wherein:

$R^2$  is -NH-Q-V-T as defined in claim 1,  
15 aryl,  
-(L)<sub>a</sub>-Z as defined in claim 1,  
linked back to the aromatic ring so as to form a fused bicyclic compound  
represented by Formula (Ia) as defined in claim 1, or  
linked back to the aromatic ring so as to form a fused bicyclic compound  
20 represented by Formula (Ib) as defined in claim 1;  
unless X is N in which case  $R^2$  is absent.

4. A compound as claimed in any one of Claims 1 to 3  
wherein:

25  $R^2$  is -NH-Q-V-T wherein Q is -C(O)-NH-, or -C(O)O-;  
V is as defined in claim 1; and  
T is as defined in claim 1;

aryl,  
-(L)<sub>a</sub>-Z as defined in claim 1,  
30 linked back to the aromatic ring so as to form a fused bicyclic compound  
represented by Formula (Ia) as defined in claim 1, or

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linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ib) as defined in claim 1;  
 unless X is N in which case R<sup>2</sup> is absent.

5 5. A compound as claimed in Claim 1

wherein:

R<sup>1</sup> is -H,

C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or  
 10 aryl-C<sub>1-4</sub>alkyl;

R<sup>2</sup> is -H,

-OH,

-NH<sub>2</sub>,

-NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO<sub>2</sub>-;

V is aryl, aryl-C<sub>1-12</sub>alkyl, diaryl-C<sub>1-12</sub>alkyl, lactonyl, or C<sub>1-18</sub>alkyl optionally substituted with halogen, hydroxyl, C<sub>1-4</sub>alkoxy, -C(O)OC<sub>1-4</sub>alkyl, -OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-4</sub>alkoxy, aryloxy, or SO<sub>2</sub>C<sub>1-4</sub>alkyl; and

20 T is H, halogen, aryl, aryl-C<sub>1-4</sub>alkyl, or aryloxy,

unless X is N in which case R<sup>2</sup> is absent

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH,

25 R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH,

X is C or N,

30 W is C or N, provided that both X and Y are not N,

W' is C

Y is C or N

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Y' is C

A is optionally a double bond,  $(\text{CH}_2)_q$  or  $(\text{CH}_2)\text{O}(\text{CH}_2)$ ,

m, n, o and p are independently 0, 1, 2 or 3

q is optionally 1, 2 or 3

5 r is 0.

6. A compound as claimed in claim 5 wherein  $\text{R}^1$  is H,  $\text{C}_{1-6}$ alkyl optionally substituted with 1 or 2 hydroxyl groups, or aryl- $\text{C}_{1-4}$ alkyl.

10 7. A compound as claimed in claim 6 wherein  $\text{R}^1$  is benzyl, p-methoxybenzyl, furanylmethyl, imidazolymethyl, pyridinylmethyl, thienylmethyl, pyridylmethyl, N-hydroxypyridylmethyl or thiazolymethyl.

15 8. A compound as claimed in any one of claims 5 to 7 wherein  $\text{R}^2$  is H,  $\text{R}^3$  is carbonamido ( $-\text{CONH}_2$ ) or  $\text{C}_{1-4}$ alkyl-OH, and  $\text{R}^4$  is H,  $\text{C}_{1-4}$ alkyl,  $\text{CF}_3$ , halogen or cyano.

9. A compound as claimed in any one of claims 5 to 7 wherein  $\text{R}^2$  is OH, and  $\text{R}^3$  and  $\text{R}^4$  each independently represent H,  $\text{C}_{1-4}$ alkyl,  $\text{CF}_3$ , cyano or halogen.

20 10. A compound as claimed in any one of claims 5 to 7 wherein  $\text{R}^2$  is of formula  $-\text{NH-Q-V-T}$ ; T is H and  $\text{R}^3$  and  $\text{R}^4$  each independently represent H, methyl,  $\text{CF}_3$ , chloro- or cyano-.

25 11. A compound as claimed in any one of claims 5 to 7 wherein  $\text{R}^2$  is of formula  $-\text{NH-SO}_2\text{-V-T}$ ; V is aryl,  $-\text{C}_{1-12}$ alkyl or aryl- $\text{C}_{1-12}$ alkyl;  $\text{R}_3$  is H, methyl,  $\text{CF}_3$ , Cl or cyano and  $\text{R}^4$  is H.

30 12. A compound as claimed in any one of claims 5 to 7 wherein  $\text{R}^2$  is of formula  $-\text{NH-SO}_2\text{-V-T}$ , V is selected from  $\text{C}_{1-12}$ alkyl, phenyl, naphthyl, thienyl, oxazolyl, isoxazolyl, or phenyl( $\text{CH}=\text{CH}$ )-, optionally substituted with 1, 2, 3 or 4 substituents selected from:

$-\text{NO}_2$ ;

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halogen;  
-CF<sub>3</sub>;  
C<sub>1-12</sub>alkoxy;  
C<sub>1-12</sub>alkylthio;  
5 C<sub>1-12</sub>alkyl;  
C<sub>1-4</sub>alkylsulfonyl;  
-CN;  
-OCF<sub>3</sub>;  
-C(O)OC<sub>1-4</sub>alkyl;  
10 -OCH<sub>2</sub>CF<sub>3</sub>;  
-NHC(O)C<sub>1-4</sub>alkyl.

13. A compound as claimed in any one of claims 5 to 7 wherein R<sup>2</sup> is of formula –  
NH-SO<sub>2</sub>-V-T, T is selected from H; or diazole, oxazole, isoxazole, phenyl or phenoxy,  
15 optionally substituted with 1, 2, 3 or 4 substituents selected from

-NO<sub>2</sub>;  
halogen;  
-CF<sub>3</sub>;  
C<sub>1-12</sub>alkoxy;  
20 C<sub>1-12</sub>alkylthio;  
C<sub>1-12</sub>alkyl;  
C<sub>1-4</sub>alkylsulfonyl;  
-CN;  
-OCF<sub>3</sub>;  
25 -C(O)OC<sub>1-4</sub>alkyl;  
-OCH<sub>2</sub>CF<sub>3</sub>;  
-NHC(O)C<sub>1-4</sub>alkyl.

14. A compound as claimed in any one of claims 5 to 7 wherein R<sup>2</sup> is of formula –  
30 NH-SO<sub>2</sub>-V-T, V is selected from 3-chloro-4-methylphenyl, 3-chlorophenyl, 3-methoxyphenyl, 4-bromophenyl, 4-methoxyphenyl, 4-methylphenyl, naphthyl, 2,4,6-trimethylphenyl, phenyl(CH=CH)-, 4-chlorophenyl, 2-chlorophenyl, 2,5-dichlorophenyl, 3-

yl, 2,5,6-trimethyl-4-methoxyphenyl, 4-methoxyphenyl, 2,3,4-trifluorophenyl, 3-cyanophenyl, 2-methoxycarbonylthien-3-yl or 4-pentylphenyl and T is H.

15. A compound as claimed in any one of claims 5 to 7 wherein  $R^2$  is of formula –

5 NH-SO<sub>2</sub>-V-T, T is 2-chloro-5-nitrophenoxy and V is phenyl.

16. A compound as claimed in any one of claims 5 to 7 wherein  $R^2$  is of formula –

NH-C(O)-V-T wherein V is selected from aryl; aryl-C<sub>1-12</sub>alkyl; diaryl-C<sub>1-12</sub>alkyl; lactonyl; or C<sub>1-18</sub>alkyl optionally substituted with halogen, hydroxyl, C<sub>1-4</sub>alkoxy, C(O)OC<sub>1-4</sub>alkyl,

10 OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-4</sub>alkoxy or aryloxy.

17. A compound as claimed in any one of claims 5 to 7 wherein  $R^2$  is of formula –

NH-C(O)-V-T, and V is selected from C<sub>1-12</sub>alkyl, phenyl, phenyl-C<sub>1-12</sub>alkyl, diphenylmethyl, naphthyl, furanyl, thienyl, diazolyl, pyridinyl, thiazolyl, benzothienyl, 15 fluorenyl, oxazolyl or isoxazolyl, optionally substituted with 1, 2, 3 or 4 substituents independently selected from

-NO<sub>2</sub>;

halogen;

-CF<sub>3</sub>;

20 C<sub>1-12</sub>alkoxy;

C<sub>1-12</sub>alkylthio;

C<sub>1-12</sub>alkyl;

C<sub>1-4</sub>alkylsulfonyl;

-CN;

25 -OCF<sub>3</sub>;

-C(O)O-C<sub>1-4</sub>alkyl;

-OCH<sub>2</sub>CF<sub>3</sub>.

18. A compound as claimed in any one of claims 5 to 7 wherein  $R^2$  is of formula –

30 NH-C(O)-V-T, T is selected from H; halogen; or diazole, oxazole, isoxazole, phenyl, phenoxy or benzodioxanyl optionally substituted with 1, 2, 3 or 4 substituents selected from



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-NO<sub>2</sub>;  
halogen;  
-CF<sub>3</sub>;  
C<sub>1-12</sub>alkylthio;  
C<sub>1-12</sub>alkoxy;  
C<sub>1-12</sub>alkyl;  
C<sub>1-4</sub>alkylsulfonyl;  
-CN;  
-OCF<sub>3</sub>;  
-C(O)O-C<sub>1-4</sub>alkyl.

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19. A compound as claimed in any one of Claims 5 to 7 wherein R<sup>2</sup> is of formula – NH-C(O)NH-V-T wherein V is selected from C<sub>1-18</sub>alkyl optionally substituted with halogen, hydroxyl, C<sub>1-4</sub>alkoxy, C(O)OC<sub>1-4</sub>alkyl, OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-4</sub>alkoxy or aryloxy; aryl; or aryl-C<sub>1-12</sub>alkyl.

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20. A compound as claimed in any one of claims 5 to 7 wherein R<sup>2</sup> is of formula – NH-C(O)NH-V-T, V is selected from phenyl, phenyl-C<sub>1-12</sub>alkyl or naphthyl optionally substituted with 1, 2, 3 or 4 substituents selected from

-NO<sub>2</sub>;  
halogen;  
-CF<sub>3</sub>;  
C<sub>1-12</sub>alkylthio;  
C<sub>1-12</sub>alkoxy;  
C<sub>1-12</sub>alkyl;  
C<sub>1-4</sub>alkylsulfonyl;  
-CN;  
-OCF<sub>3</sub>;  
-C(O)O-C<sub>1-4</sub>alkyl.

21. A compound as claimed in any one of claims 5 to 7 wherein R<sup>2</sup> is of formula – NH-C(O)O-V-T, wherein V is selected from C<sub>1-18</sub>alkyl optionally substituted with

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halogen, hydroxyl, C<sub>1-4</sub>alkoxy, C(O)OC<sub>1-4</sub>alkyl, OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-4</sub>alkoxy or aryloxy; aryl; or aryl-C<sub>1-12</sub>alkyl.

22. A compound as claimed in any one of claims 5 to 7 wherein R<sup>2</sup> is of formula –  
5 NH-C(O)O-V-T, preferably V is selected from phenyl or phenyl-C<sub>1-12</sub>alkyl optionally substituted with 1, 2, 3 or 4 substituents selected from

-NO<sub>2</sub>;  
halogen;  
-CF<sub>3</sub>;  
10 C<sub>1-12</sub>alkylthio;  
C<sub>1-12</sub>alkoxy;  
C<sub>1-12</sub>alkyl;  
C<sub>1-4</sub>alkylsulfonyl;  
-CN;  
15 -OCF<sub>3</sub>;  
-C(O)O-C<sub>1-4</sub>alkyl; or  
-OCH<sub>2</sub>CF<sub>3</sub>.

23. A compound as claimed in claim 1 wherein R<sup>2</sup> is of formula –NH-C(O)-V-T  
20 wherein V is H, C<sub>1-6</sub>alkyl, C<sub>3-6</sub>cycloalkyl, aryl or aryl-C<sub>1-12</sub>alkyl; and  
T is H, halogen, C<sub>1-5</sub>alkyl, C<sub>1-4</sub>alkoxy, nitro, aryl, aryl-C<sub>1-4</sub>alkyl, or aryloxy  
unless V is H in which case T is absent.

24. A compound as claimed in claim 23  
25 wherein V is H, C<sub>1-6</sub>alkyl or C<sub>3-6</sub>cycloalkyl; and  
T is H unless V is H in which case T is absent.

25. A compound as claimed in claim 23  
wherein V is aryl or aryl-C<sub>1-12</sub>alkyl; and  
30 T is H, halogen, C<sub>1-5</sub>alkyl, C<sub>1-4</sub>alkoxy, nitro, aryl, aryl-C<sub>1-4</sub>alkyl, or aryloxy.

26. A compound as claimed in claim 25

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wherein V is phenyl, pyridyl, thienyl, thiazolyl, thiadiazolyl, or phenyl-C<sub>1-6</sub>alkyl;

and

T is H, halogen, C<sub>1-5</sub>alkyl, C<sub>1-4</sub>alkoxy, nitro, aryl, aryl-C<sub>1-4</sub>alkyl, or aryloxy.

5 27. A compound as claimed in claim 1

wherein

R<sup>1</sup> is -H,

C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently  
selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or  
aryl-C<sub>1-4</sub>alkyl;

R<sup>2</sup> is -NH<sub>2</sub>, or

-NH-Q-V-T, wherein Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO<sub>2</sub>-;  
V is H, aryl, aryl-C<sub>1-12</sub>alkyl, diaryl-C<sub>1-12</sub>alkyl,  
lactonyl, or C<sub>1-18</sub>alkyl optionally substituted  
with halogen, hydroxyl, C<sub>1-4</sub>alkoxy, -  
C(O)OC<sub>1-4</sub>alkyl, -OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-4</sub>  
alkoxy, aryloxy, or SO<sub>2</sub>C<sub>1-4</sub>alkyl; and  
T is H, halogen, aryl, aryl-C<sub>1-4</sub>alkyl, or  
aryloxy unless V is H in which case T is  
absent,

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine  
atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>  
cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -  
SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine  
atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>  
cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -  
SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

X is C;

W is C or N;

W' is C or N;

Y is C or N;

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Y' is C or N;

provided that there are not more than two N atoms in the aryl ring and provided that at least one of W, W', Y or Y' is N;

A is optionally a CH=CH double bond, (CH<sub>2</sub>)<sub>q</sub> or (CH<sub>2</sub>)O(CH<sub>2</sub>);

5 m,n,o and p are independently 0, 1, 2 or 3;

q is optionally 1, 2 or 3;

r is 0, 1 or 2.

28. A compound as claimed in claim 27

10 wherein

W is C;

W' is C;

Y' is C; and

Y is N.

15

29. A compound as claimed in claim 27

wherein

W is N;

W' is C;

20 Y' is C; and

Y is C.

30. A compound as claimed in any one of claims 27 to 29

wherein

25 R<sup>2</sup> is -NH<sub>2</sub>.

31. A compound as claimed in any one of claims 27 to 29

wherein

R<sup>2</sup> is -NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO<sub>2</sub>;

V is H, aryl, aryl-C<sub>1-12</sub>alkyl, diaryl-C<sub>1-12</sub>alkyl,

lactonyl, or C<sub>1-18</sub>alkyl optionally substituted

with halogen, hydroxyl, C<sub>1-4</sub>alkoxy, -

30

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C(O)OC<sub>1-4</sub>alkyl, -OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-4</sub>alkoxy, aryloxy, or SO<sub>2</sub>C<sub>1-4</sub>alkyl; and  
 T is H, halogen, aryl, aryl-C<sub>1-4</sub>alkyl, or  
 aryloxy unless V is H in which case T is  
 absent.

5

32. A compound as claimed in claim 31  
 wherein

Q is -SO<sub>2</sub>- or -CO-.

10

33. A compound as claimed in claim 1  
 wherein

R<sup>1</sup> is -H,

C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently  
 selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or  
 aryl-C<sub>1-4</sub>alkyl;

15

R<sup>2</sup> is aryl,

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine  
 atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -  
 SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH,

20

R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine  
 atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -  
 SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

25

X is C,

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

30

provided that there are no more than two N atoms in the aryl ring;

A is optionally a CH=CH double bond, (CH<sub>2</sub>)<sub>q</sub> or (CH<sub>2</sub>)O(CH<sub>2</sub>);

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m,n,o and p are independently 0, 1, 2 or 3;

q is optionally 1, 2 or 3;

r is 0, 1 or 2.

- 5 34. A compound as claimed in claim 33 wherein R<sup>2</sup> is a C<sub>3</sub> to C<sub>12</sub> aromatic or heteroaromatic group optionally substituted with one or more substituents selected from C<sub>1-12</sub>alkyl, C<sub>1-12</sub>alkoxy, thio, C<sub>1-12</sub>alkylthio, carboxy, carboxy(C<sub>1-6</sub>alkyl), formyl, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkylsulfonyl, C<sub>1-6</sub>alkylcarbonylalkoxy, nitro, trihalomethyl, trihaloalkoxy, trihalomethoxy, trihalomethyl(C<sub>1-6</sub>alkyl), hydroxy, hydroxy(C<sub>1-6</sub>alkyl), (C<sub>1-6</sub>alkoxy)carbonyl, amino, C<sub>1-6</sub>alkylamino, di(C<sub>1-6</sub>alkyl)amino, aminocarboxy, C<sub>1-6</sub>alkylaminocarboxy, di(C<sub>1-6</sub>alkyl)aminocarboxy, aminocarboxy(C<sub>1-6</sub>alkyl), C<sub>1-6</sub>alkylaminocarboxy(C<sub>1-6</sub>alkyl), di(C<sub>1-6</sub>alkyl)aminocarboxy(C<sub>1-6</sub>alkyl), C<sub>1-6</sub>alkylcarbonylamino, C<sub>1-6</sub>alkylcarbonyl(C<sub>1-6</sub>alkyl)amino, halo, C<sub>1-6</sub>alkylhalo, sulphamoyl, tetrazolyl and cyano.
- 15 35. A compound as claimed in claim 33 wherein R<sup>2</sup> is phenyl, naphthyl, fluorenyl, thienyl, furanyl, pyrrolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxazolyl, isoxazolyl, oxadiazolyl, thiadiazolyl, diazolyl, triazolyl, tetrazolyl, benzothiazolyl, benzimidazolyl, pyrrolinyl, imidazolinyl, pyranyl, pyronyl, pyridyl, pyrazinyl, pyridazinyl, 20 thianaphthyl, benzofuranyl, isobenzofuranyl, benzothienyl, isobenzothienyl, indolyl, oxyindolyl, isoindolyl, indazolyl, indolinyl, 7-azaindolyl, azabenzimidazolyl, carbazolyl, benzopyranyl, coumarinyl, isocoumarinyl, quinolinyl, isoquinolinyl, quinazolinyl, benzoxazinyl, quinoxalinyl, chromenyl, chromanyl, isochromanyl, phthalazinyl, benzodioxolyl, benzodioxanyl, cinnolinyl or carbolinyl optionally substituted with one or more substituents selected from C<sub>1-12</sub>alkyl, C<sub>1-12</sub>alkoxy, thio, C<sub>1-12</sub>alkylthio, carboxy, 25 carboxy(C<sub>1-6</sub>alkyl), formyl, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkylsulfonyl, C<sub>1-6</sub>alkylcarbonylalkoxy, nitro, trihalomethyl, trihaloalkoxy, trihalomethoxy, trihalomethyl(C<sub>1-6</sub>alkyl), hydroxy, hydroxy(C<sub>1-6</sub>alkyl), (C<sub>1-6</sub>alkoxy)carbonyl, amino, C<sub>1-6</sub>alkylamino, di(C<sub>1-6</sub>alkyl)amino, aminocarboxy, C<sub>1-6</sub>alkylaminocarboxy, di(C<sub>1-6</sub>alkyl)aminocarboxy, aminocarboxy(C<sub>1-6</sub>alkyl), C<sub>1-6</sub>alkylaminocarboxy(C<sub>1-6</sub>alkyl), di(C<sub>1-6</sub>alkyl)aminocarboxy(C<sub>1-6</sub>alkyl), C<sub>1-6</sub>alkylcarbonylamino, C<sub>1-6</sub>alkylcarbonyl(C<sub>1-6</sub>alkyl)amino, halo, C<sub>1-6</sub>alkylhalo, sulphamoyl, 30 tetrazolyl and cyano.

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36. A compound as claimed in claim 33 wherein R<sup>2</sup> is phenyl, thienyl, imidazolyl, oxazolyl, isoxazolyl, oxadiazolyl, thiadiazolyl, diazolyl, triazolyl, tetrazolyl, benzothiazolyl, benzimidazolyl, pyridyl, pyrazinyl, pyridazinyl, benzofuranyl, benzothienyl, or quinoliny, optionally substituted with one or more substituents selected from C<sub>1-12</sub>alkyl, C<sub>1-12</sub>alkoxy, thio, C<sub>1-12</sub>alkylthio, carboxy, carboxy(C<sub>1-6</sub>alkyl), formyl, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkylsulfonyl, C<sub>1-6</sub>alkylcarbonylalkoxy, nitro, trihalomethyl, trihaloalkoxy, trihalomethoxy, trihalomethyl(C<sub>1-6</sub>alkyl), hydroxy, hydroxy(C<sub>1-6</sub>alkyl), (C<sub>1-6</sub>alkoxy)carbonyl, amino, C<sub>1-6</sub>alkylamino, di(C<sub>1-6</sub>alkyl)amino, aminocarboxy, C<sub>1-6</sub>alkylaminocarboxy, di(C<sub>1-6</sub>alkyl)aminocarboxy, aminocarboxy(C<sub>1-6</sub>alkyl), C<sub>1-6</sub>alkylaminocarboxy(C<sub>1-6</sub>alkyl), di(C<sub>1-6</sub>alkyl)aminocarboxy(C<sub>1-6</sub>alkyl), C<sub>1-6</sub>alkylcarbonylamino, C<sub>1-6</sub>alkylcarbonyl(C<sub>1-6</sub>alkyl)amino, halo, C<sub>1-6</sub>alkylhalo, sulphamoyl, tetrazolyl and cyano.

37. A compound as claimed in claim 1 wherein:

R<sup>1</sup> is -H,

C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or aryl-C<sub>1-4</sub>alkyl;

R<sup>2</sup> is (L)<sub>a</sub>-Z, wherein

L is O, CO, CH<sub>2</sub>, NH or N(C<sub>1-4</sub>alkyl) and a is 0 or 1; and

Z is C<sub>1-3</sub>alkyl-F, C<sub>0-3</sub>alkyl-aryl-R<sup>6</sup>, C<sub>0-3</sub>alkyl-CO-R<sup>6</sup>, C<sub>0-3</sub>alkyl-CO-NR<sup>6</sup><sub>2</sub>, C<sub>0-3</sub>alkyl-CO<sub>2</sub>-R<sup>6</sup>, C<sub>0-3</sub>alkyl-SO<sub>2</sub>-R<sup>6</sup>, C<sub>0-3</sub>alkyl-SO<sub>2</sub>-NR<sup>6</sup><sub>2</sub>, C<sub>1-3</sub>alkyl-OR<sup>6</sup>, C<sub>1-3</sub>alkyl-CN or C<sub>1-3</sub>alkyl-NR<sup>6</sup><sub>2</sub> wherein each C<sub>0-3</sub>alkyl or C<sub>1-3</sub>alkyl portion is optionally substituted with from 1 to 6 groups selected from F and C<sub>1-5</sub>alkyl,

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

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R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

5 R<sup>6</sup> is each independently H, C<sub>1-6</sub>alkyl, aryl, or arylC<sub>1-4</sub>alkyl, each of which (except H) may be optionally substituted with from 1 to 3 fluorine atoms;

X is C;

W is C or N,

Y is C or N,

10 W' is C or N,

Y' is C or N,

provided that there are no more than two N atoms in the aryl ring,

A is optionally a double bond, (CH<sub>2</sub>)<sub>q</sub> or (CH<sub>2</sub>)O(CH<sub>2</sub>);

m,n,o and p are independently 0, 1, 2 or 3;

15 q is optionally 1, 2 or 3;

r is 0, 1 or 2.

38. A compound as claimed in claim 37 wherein L is O, CO or CH<sub>2</sub>.

20 39. A compound as claimed in claim 37 wherein L is NH or N(C<sub>1-4</sub>alkyl).

40. A compound as claimed in any one of claims 37 to 39 wherein Z is C<sub>0-3</sub>alkyl-aryl-R<sup>6</sup>, C<sub>0-3</sub>alkyl-CO-NR<sup>6</sup><sub>2</sub>, C<sub>0-3</sub>alkyl-CO<sub>2</sub>-R<sup>6</sup>, C<sub>1-3</sub>alkyl-OR<sup>6</sup> or C<sub>1-3</sub>alkyl-NR<sup>6</sup><sub>2</sub> wherein each C<sub>0-3</sub>alkyl or C<sub>1-3</sub>alkyl portion is optionally substituted with from 1 to 6 groups selected  
25 from F and C<sub>1-5</sub>alkyl.

41. A compound as claimed in any one of claims 37 to 40 wherein Z is C<sub>0-3</sub>alkyl-aryl-R<sup>6</sup> wherein aryl is selected from phenyl, naphthyl, fluorenyl, thienyl, furanyl, pyrrolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxazolyl, isoxazolyl, oxadiazolyl,  
30 thiadiazolyl, diazolyl, triazolyl, tetrazolyl, benzothiazolyl, benzimidazolyl, pyrrolinyl, imidazolinyl, pyranyl, pyronyl, pyridyl, pyrazinyl, pyridazinyl, thianaphthyl, benzofuranyl, isobenzofuranyl, benzothieryl, isobenzothieryl, indolyl, oxyindolyl, isoindolyl, indazolyl,



indolinyl, 7-azaindolyl, azabenzimidazolyl, carbazolyl benzopyranyl, coumarinyl, isocoumarinyl, quinolinyl, isoquinolinyl, quinazolinyl, benzoxazinyl, quinoxalinyl, chromenyl, chromanyl, isochromanyl, phthalazinyl, benzodioxolyl, benzodioxanyl, cinnolinyl or carbolinyl optionally, be substituted with one or more substituents selected from C<sub>1</sub> to C<sub>12</sub> alkyl (preferably C<sub>1</sub> to C<sub>6</sub> alkyl), C<sub>1</sub> to C<sub>12</sub> alkoxy (preferably C<sub>1</sub> to C<sub>6</sub> alkoxy), thio, C<sub>1</sub> to C<sub>12</sub> alkylthio (preferably C<sub>1</sub> to C<sub>6</sub> alkylthio), carboxy, carboxy(C<sub>1</sub> to C<sub>6</sub>)alkyl, formyl, C<sub>1</sub> to C<sub>6</sub> alkylcarbonyl, C<sub>1</sub> to C<sub>6</sub> alkylsulfonyl, C<sub>1</sub> to C<sub>6</sub> alkylcarbonylalkoxy, nitro, trihalomethyl, trihalo(C<sub>1</sub> to C<sub>6</sub> alkoxy), trihalomethoxy, trihalomethyl(C<sub>1</sub> to C<sub>6</sub> alkyl), hydroxy, hydroxy(C<sub>1</sub> to C<sub>6</sub>)alkyl, (C<sub>1</sub> to C<sub>6</sub> alkoxy)carbonyl, amino, C<sub>1</sub> to C<sub>6</sub> alkylamino, di(C<sub>1</sub> to C<sub>6</sub> alkyl)amino, aminocarboxy, C<sub>1</sub> to C<sub>6</sub> alkylaminocarboxy, di(C<sub>1</sub> to C<sub>6</sub> alkyl)aminocarboxy, aminocarboxy(C<sub>1</sub> to C<sub>6</sub>)alkyl, C<sub>1</sub> to C<sub>6</sub> alkylaminocarboxy(C<sub>1</sub> to C<sub>6</sub>)alkyl, di(C<sub>1</sub> to C<sub>6</sub> alkyl)aminocarboxy(C<sub>1</sub> to C<sub>6</sub>)alkyl, C<sub>1</sub> to C<sub>6</sub> alkylcarbonylamino, C<sub>1</sub> to C<sub>6</sub> alkylcarbonyl(C<sub>1</sub> to C<sub>6</sub> alkyl)amino, halo, C<sub>1</sub> to C<sub>6</sub> alkylhalo, sulphamoyl, tetrazolyl and cyano and wherein each C<sub>0-3</sub>alkyl portion is optionally substituted with from 1 to 3 groups selected from F and C<sub>1-3</sub>alkyl.

42. A compound as claimed in any one of claims 37 to 40 wherein Z is C<sub>1-3</sub>alkyl-CO-NR<sup>6</sup><sub>2</sub>, wherein each C<sub>1-3</sub>alkyl portion is optionally substituted with from 1 to 3 groups selected from F and C<sub>1-3</sub>alkyl.

43. A compound as claimed in any one of claims 37 to 40 wherein Z is C<sub>1-3</sub>alkyl-CO<sub>2</sub>-R<sup>6</sup>, wherein each C<sub>1-3</sub>alkyl portion is optionally substituted with from 1 to 3 groups selected from F and C<sub>1-3</sub>alkyl.

44. A compound as claimed in any one of claims 37 to 40 wherein Z is C<sub>1-3</sub>alkyl-OR<sup>6</sup> wherein each C<sub>1-3</sub>alkyl portion is optionally substituted with from 1 to 3 groups selected from F and C<sub>1-3</sub>alkyl.

45. A compound as claimed in any one of claims 37 to 40 wherein Z is C<sub>1-3</sub>alkyl-NR<sup>6</sup><sub>2</sub> wherein each C<sub>1-3</sub>alkyl portion is optionally substituted with from 1 to 3 groups selected from F and C<sub>1-3</sub>alkyl.

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46. A compound as claimed in any one of claims 37 to 45 wherein  $R^6$  is/are each independently H,  $C_{1-6}$ alkyl, phenyl, or phenyl $C_{1-4}$ alkyl, each of which (except H) may be optionally substituted with from 1 to 3 fluorine atoms.

5 47. A compound as claimed in any one of claims 37 to 46 wherein  $R^6$  is/are each independently H, methyl, ethyl, propyl, cyclohexyl, or benzyl, each of which (except H) may be optionally substituted with 1, 2 or 3 fluorine atoms.

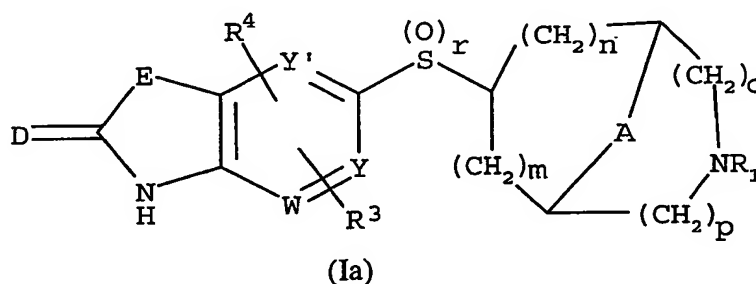
48. A compound as claimed in Claim 1

10 wherein:

$R^1$  is -H,

$C_{1-12}$ alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol,  $C_{1-4}$ alkoxy or  $C_{1-4}$ alkylthio, or aryl- $C_{1-4}$ alkyl;

15  $R^2$  is linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



wherein D is O or S; and

20 E is O, S,  $NR^5$ , or  $C(R^5)_2$ ,

$R^3$  is H, halogen,  $C_{1-4}$ alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano,  $CF_3$ ,  $OC_{1-4}$ alkyl, aryloxy, aryl $C_{1-4}$ alkyl, aryl $C_{1-4}$ alkoxy,  $C_{3-10}$ cycloalkoxy, carboxy, carbonamido,  $-CO-NH-C_{1-4}$ alkyl, aryl, hydroxy,  $-SO_2NH_2$ ,  $-SO_2NHC_{1-4}$ alkyl, or  $-C_{1-4}$ alkyl-OH;

25  $R^4$  is H, halogen,  $C_{1-4}$ alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano,  $CF_3$ ,  $OC_{1-4}$ alkyl, aryloxy, aryl $C_{1-4}$ alkyl, aryl $C_{1-4}$ alkoxy,  $C_{3-10}$ cycloalkoxy, carboxy, carbonamido,  $-CO-NH-C_{1-4}$ alkyl, aryl, hydroxy,  $-SO_2NH_2$ ,  $-SO_2NHC_{1-4}$ alkyl, or  $-C_{1-4}$ alkyl-OH;

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cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>5</sup> is each independently H or C<sub>1-4</sub>alkyl;

X is C;

5 W is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring,

A is optionally a double bond, (CH<sub>2</sub>)<sub>q</sub> or (CH<sub>2</sub>)O(CH<sub>2</sub>);

10 m,n,o and p are independently 0, 1, 2 or 3;

q is optionally 1, 2 or 3;

r is 0, 1 or 2.

49. A compound as claimed in Claim 48 wherein E is O or NR<sup>5</sup>.

15

50. A compound as claimed in Claim 48 or 49 wherein R<sup>5</sup> is/are each independently H or C<sub>1-4</sub>alkyl.

51. A compound as claimed in Claim 1

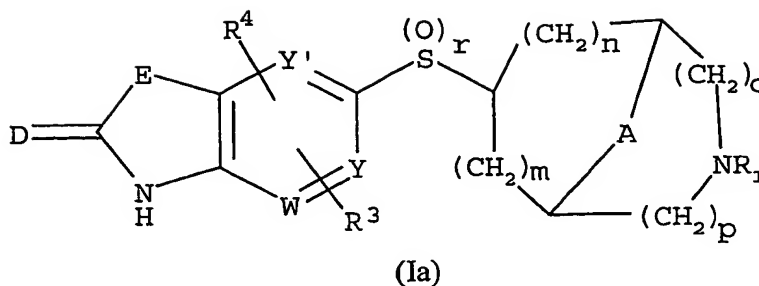
20 wherein:

R<sup>1</sup> is -H,

C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or aryl-C<sub>1-4</sub>alkyl;

25 R<sup>2</sup> is linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)

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wherein D is O or S; and

E is O-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CO, CR<sup>5</sup><sub>2</sub>-O, CR<sup>5</sup><sub>2</sub>-S(O)<sub>r</sub>, CR<sup>5</sup><sub>2</sub>-NR<sup>5</sup>, CR<sup>5</sup><sub>2</sub>-CR<sup>5</sup><sub>2</sub>, CO-NR<sup>5</sup>, or CR<sup>5</sup>=CR<sup>5</sup>;

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>5</sup> is each independently H, C<sub>1-4</sub>alkyl;

X is C;

W is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

A is optionally a double bond or (CH<sub>2</sub>)<sub>q</sub> or (CH<sub>2</sub>)O(CH<sub>2</sub>);

m, n, o and p are independently 0, 1, 2 or 3;

q is optionally 1, 2 or 3;

r is 0, 1 or 2.

52. A compound as claimed in Claim 51 wherein E is O-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CO, CR<sup>5</sup><sub>2</sub>-CR<sup>5</sup><sub>2</sub>, or CR<sup>5</sup>=CR<sup>5</sup>.

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53. A compound as claimed in Claim 51 or 52 wherein E is O-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CO, or CR<sup>5</sup>=CR<sup>5</sup>.

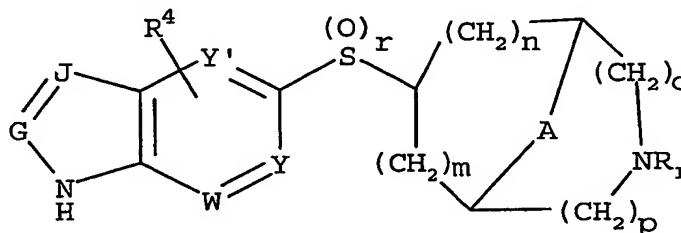
54. A compound as claimed in any one of Claims 51 to 53 wherein R<sup>5</sup> is/are each independently H or C<sub>1-4</sub>alkyl.

55. A compound as claimed in Claim 1 wherein:

R<sup>1</sup> is -H,

C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or aryl-C<sub>1-4</sub>alkyl;

R<sup>2</sup> is linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ib)



Formula (Ib)

wherein G is CR<sup>5</sup> or N; and

J is CR<sup>5</sup> or N;

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

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R<sup>5</sup> is each independently H or C<sub>1-4</sub>alkyl;

X is C;

W is C or N;

Y is C or N;

5 Y' is C or N

provided that there are no more than two N atoms in the aryl ring;

A is optionally a double bond or (CH<sub>2</sub>)<sub>q</sub> or (CH<sub>2</sub>)O(CH<sub>2</sub>);

m,n,o and p are independently 0, 1, 2 or 3;

q is optionally 1, 2 or 3;

10 r is 0, 1 or 2.

56. A compound as claimed in Claim 5 wherein each R<sup>5</sup> is H.

57. A compound as claimed in Claim 1 or any one of claims 23 to 56 wherein r is 0.

15

58. A compound as claimed in Claim 1 or any one of claims 23 to 56 wherein r is 2.

59. A compound as claimed in any one of Claims 1 to 6 or 8 to 58 wherein R<sup>1</sup> is H or C<sub>1-3</sub>alkyl, preferably methyl.

20

60. A compound as claimed in any preceding claim wherein A is CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub> or CH=CH.

61. A compound as claimed in any preceding claim wherein m and n are 1 or 2 and o and p are 0 or 1.

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62. A compound as claimed in any preceding claim wherein m and n are 1 and o and p are 0.

63. A compound as claimed in any preceding claim wherein m and n are 1, o and p are 0 and A is CH<sub>2</sub>CH<sub>2</sub> or CH=CH.

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64. A compound as claimed in any preceding claim wherein

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl, CF<sub>3</sub>, or OC<sub>1-4</sub>alkyl, and

R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl, CF<sub>3</sub>, or OC<sub>1-4</sub>alkyl.

5 65. A compound as claimed in any preceding claim wherein one or both of R<sup>3</sup> and R<sup>4</sup> are positioned ortho to the S(O)<sub>r</sub> moiety.

66. A pharmaceutical composition comprising a compound as claimed in any preceding claim with a pharmaceutically acceptable diluent or carrier.

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67. A compound as claimed in any one of claims 1 to 65 or a composition as claimed in claim 66 for use in therapy.

68. Use of a compound as claimed in any one of claims 1 to 65 for the manufacture of  
15 a medicament for the treatment of a condition indicating treatment with a beta 4 subtype selective nicotinic acetylcholine receptor modulator.

69. A method of treatment of a condition indicating treatment with a beta 4 subtype selective nicotinic acetylcholine receptor modulator comprising administering an effective  
20 amount of a compound as claimed in any one of claims 1 to 65 or a composition as claimed in claim 66 to a patient in need thereof.

70. Use of a compound as claimed in any one of claims 1 to 65 for the manufacture of a medicament for the treatment of dysfunctions of the central and autonomic nervous  
25 systems.

71. A method of treatment of dysfunctions of the central and autonomic nervous systems comprising administering an effective amount of a compound as claimed in any one of claims 1 to 65 or a composition as claimed in claim 63 to a patient in need thereof.

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